FAX NO.

Applicant: K. Morita et al. U.S.S.N.: 10/684,262 Response to Office Action

Page 3 of 31

## Amendments to Specification

Page 33, rewrite the paragraph starting at line 12, to read as follows:

It is assumed here that the frequency spectrum shown in Fig. 5(a) was calculated based on the gear characteristics (initial input characteristics) that were extracted in S8 and that do not take into account preventing oscillation. In Fig. 5(a), the largest amplitude is obtained when the frequency component is about 35 Hz. Here, the oscillation frequency is about 35 Hz, and the amplitude at this frequency is about 1.8 mm. 1.3 mm:

In the ABSTRACT, please delete the abstract in its entirety and replace it with the replacement sheet enclosed with this response, which Abstract was amended to read as follows.

Ecatured are a system and method for designing a gear driving system. The designing system includes a characteristic setting section, calculating section and comparing section. When the gear characteristic value set in a characteristic setting section does not take into account preventing oscillation, a The calculating section simulates an oscillation that is caused in the final gear of the gear driving system, based on the gear characteristic value(s) set in the characteristic setting section. The A comparing section judges whether or not the frequency and amplitude of the oscillation in this oscillation system obtained by the simulation fall within an acceptable range. If the value frequency and amplitude do does not fall within the acceptable range, a the characteristic changing section changes the setting of a the gear characteristic value, and the processes of the calculating section and the comparing section, as well as that of are repeated. The processes of the characteristic changing section, the calculating section, and the comparing section are repeated until it is judged the comparing section judges that one of the frequency or amplitude of the simulated oscillation in the osculation system falls within the acceptable range. As a result, a gear driving system is designed in which oscillation is suppressed: